REMARKS

This Amendment and Response is in reply to the Office Action of September 24, 2007. A three (3) month Petition For Extension of Time is filed concurrently herewith. Therefore, the time period for reply extends up to and includes March 24, 2008. Applicant wishes to thank the Examiner for his careful review and consideration of the present application.

Applicant has added new claims 9 and 10. No new matter has been entered and such amendments are fully supported by the specification, drawings and claims as originally filed. For example, see page 6, lines 4-15. Claims 1-10 remain pending in the present application.

Claim Rejections Under 35 USC § 103

On page 2 of the Office Action, claims 1-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,530,887 (Gilbert et al.) in view of U.S. Patent No. 4,866,613 (Amemiya et al.). Applicant respectfully traverses the rejections.

First, claim 1 of the present application recites in part a transducer unit and a processing unit interconnected to said transducer unit and adapted to extract a blood flow signal from the operation of said transducer and process said blood flow signal so as to produce a video blood flow signal and an audio blood flow signal. By contrast, Gilbert et al. does not explicitly disclose producing an audio blood flow signal. As pointed out by the Examiner on page 3 of the subject Action, Gilbert et al. does disclose a pair of speakers and cables. However, the fact that Gilbert et al. discloses a pair of speakers and cables is neither an explicit nor an implicit disclosure of producing an audio blood flow signal. The audio can relate to anything, including playback of material previously recorded on the microphone. Therefore, it is submitted that Gilbert et al. does not disclose all the elements of claim 1 of the present application. It is also submitted that Amemiya et al. does not disclose producing an audio blood flow signal and therefore does not remedy the deficiencies of Gilbert et al. In Amemiya et al. the only identified output is video output, the cathode ray tube shown in Figures 1 and 8. Furthermore, since claims 2-6 depend either directly or indirectly from claim 1, it is submitted that claims 1-6 are allowable over the combination of Gilbert et al. and Amemiya et al.

Next, claim 7 recites in part a method of transmission of information of blood flow characteristics within a patient to a user including the step of simultaneously providing an audio output to said user of the Continuous Wave (CW) Doppler blood flow signal. Since, as discussed above, the combination of Gilbert et al. and Amemiya et al. does not disclose producing an audio blood flow signal, this combination also does not disclose providing an audio output to said user of the Continuous Wave (CW) Doppler blood flow signal as recited in claim 7 of the present application. Therefore, it is submitted that claim 7 is allowable over the combination of Gilbert et al. and Amemiya et al. Furthermore, since claim 8 depends from claim 7, it is submitted that claims 7 and 8 are allowable over the combination of Gilbert et al. and Amemiya et al.

Third, new claim 9 recites in part at least two audio emission devices interconnected to said processing unit for emission of said spatialised audio blood flow signal to the ears of said user. New claim 10 recites in part simultaneously providing a spatialised audio output to said user of the Continuous Wave (CW) Doppler blood flow signal. As discussed above, the combination of Gilbert et al. and Amemiya et al. does not disclose an audio blood flow signal or output. Furthermore, neither Gilbert et al. nor Amemiya et al. disclose the spatialisation of an audio blood flow signal. Audio spatialisation relies on projecting an audio signal over speakers so that the audio takes on position or spatial characteristics. It is a process of transforming an audio signal into another audio signal that includes spatial characteristics, for example reverberation and delay, which is typically applied by using a digital audio filter. By contrast, the spectral sonogram disclosed by Gilbert et al. is distinct from audio spatialisation. A spectral sonogram is a visual time-based representation of the frequency spectrum of windowed frames of a compound signal. A spectral sonogram is not an audio representation of the signal and does not include the application of spatial characteristics as recited in claims 9 and 10 of the present application. Therefore, it is submitted that claims 9 and 10 are allowable over the combination of Gilbert et al. and Amemiya et al.

Fourth, on page 4 of the subject Action, the Examiner cites U.S. Patent No. 5,546,943 (Gould) and U.S. Patent No. 5,447,164 (Shaya et al.) as references made of record and considered pertinent to the applicant's disclosure, but not relied upon. Applicant submits that neither Gould nor Shaya et al. disclose providing an audio form of a blood flow signal. Neither Gould nor Shaya et al. remedy the deficiencies of Gilbert et al. and Amemiya et al.

In view of the foregoing, reconsideration and withdrawal of the § 103(a) rejection to claims 1-8 is requested. Applicant does not otherwise concede the correctness of the rejections and reserves the right to make additional arguments as may be necessary.

Conclusion

In view of the above amendments and remarks, Applicant respectfully requests a Notice of Allowance. If the Examiner believes a telephone conference would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the below-listed telephone number.

Respectfully submitted,

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Date

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